

IN THE CLAIMS

Please amend claims as follows:

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Currently amended) The method of claim ~~63~~22, wherein

a pre-authorization is the primitive ~~is an authorize presence primitive~~ autonomously provided by an initiating ~~client to a server~~user to authorize transfer of presence information of ~~a said initiating user of the initiating client~~ to an authorized user, and the autonomously provided authorize presence primitive includes various information elements including an identifier identifying the user of the initiating client.

6. (Canceled)

7. (Currently amended) The method of claim ~~63~~31, wherein

~~the primitive is a message primitive provided by a message sending client of a message sending user to a message server and from the message server to a message receiving client, and~~

the message primitive has various information elements including a message sending client identifier, a message sending user identifier, and a message content type identifier.

8. (Currently amended) The method of claim 7, wherein

in response to the message primitive, a delivery primitive is provided ~~by the message server to the message sending client~~user, and

the delivery primitive has various information elements including a delivery status element.

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Currently amended) The method of claim ~~63~~22, wherein said presence attribute values are associated with corresponding presence attributes classified and typed according to a standard.

18. (Canceled)

19. (Currently amended) The method of claim ~~63~~22, wherein said method is performed in a presence information management system ~~has~~ having at least one server able to communicate with a plurality of devices, wherein a communication protocol is used between the at least one server and the plurality of devices.

20. (Canceled)

21. (Currently amended) The method of claim ~~63~~22, wherein said space and time information has a validity attribute associated thereto.

22. (Currently amended) A method, ~~for use by a presence server capable of communicating with a plurality of users through their respective clients, wherein presence information of the users and/or the clients is requested or provided through the server in terms of primitives, said method comprising:~~

~~—receiving an authorize presence primitive from an authorizing user authorizing access to selected presence information of said authorizing user,~~

~~receiving an update presence primitive from an updating user, wherein said update presence primitive includes one or more presence values to be updated,~~

~~—receiving a get presence primitive from a requesting user for requesting presence information of a requested user, to which a response including requested presence information is required, or~~

~~receiving a subscribe presence primitive from a client of a subscribing requesting user for requesting subscribing presence information of the a requested user, to which on-going responses including requested presence information are required,~~

~~determining if access a subscription to said presence information of the requested user has been authorized or pre-authorized by the requested user,~~

~~and, if the subscription has not been pre-authorized, requesting an authorization and receiving an authorize presence primitive from the requested user,~~

~~and if the subscription has been authorized or pre-authorized,~~

~~providing a presence primitive including said requested presence information of the requested user to the requesting user according to the subscription,~~

~~wherein said subscription is valid for a period of time in which or providing one or more presence primitives including requested presence information of the requested user are provided on an on-going basis to said client of said subscribing requesting user, particularly~~

after receiving an update presence primitive of said presence information including one or more presence attribute values to be updated from said requested user,

wherein ~~a~~the presence primitive comprises one or more information elements including a presence information element, said presence information element comprises one or more presence attributes, the values of the attributes indicating presence status of ~~a~~the requested user or a client of the requested user at the time the presence information is provided, said presence attributes are classifiable in any one or more of the following: client reachability, user availability, user personal status, user or client location, and client capabilities,

and wherein said values of the presence attributes have associated space and time information useable by ~~the~~a presence server to modify said presence attribute values or related presence attribute values in processing said presence primitive.

23. (Currently amended) The method of claim 22, wherein said one or more information elements further include a message identifier, a transaction identifier, and an identification of ~~a~~the requested user and/or ~~a~~the requesting user.

24. (Canceled)

25. (Currently amended) The method of claim 22, wherein said requesting authorization from ~~a~~the requested user is carried out by providing a request presence authorization primitive, said request presence authorization primitive comprises one or more information elements including a message identifier, an authorization request transaction identifier, a requesting user identifier and a list of presence attributes whose values are to be included in the presence primitive.

26. (Currently amended) The method of claim 22, wherein said authorize presence primitive comprises one or more information elements including a message identifier, an transaction identifier, a requesting user identifier, and a list of presence attributes whose values are to be included in the presence primitive.

27. (Previously presented) The method of claim 26, wherein said authorize presence primitive further comprises a group identifier if the authorization is related to a group.

28. (Canceled)

29. (Previously presented) The method of claim 22, further comprising:

receiving a join group primitive from a joining member user joining a private user group,

providing presence primitives indicative of presence information of member users of said private user group to said joining member user upon joining said private user group but not after departing, and

providing a group left primitive indicative of a departing member user to remaining private user group member users upon receipt of a leave group primitive indicative of said departing member user.

30. (Currently amended) The method of claim 29, wherein the joining member user may join the group only if said join group primitive is preceded by an invite user primitive provided by an inviting user to said joining member user.

31. (Currently amended) The method of claim 22, further comprising:

receiving a create group primitive from a member user creating a user group, said create group primitive having information elements indicative of identification of a client used by the member user creating the user group, identification of the member user creating the user group, and a list of other member users of the user group,

~~reporting to the member users with~~providing a group information primitive to the other member users indicative of establishment of the user group and selected group information, and

permitting member users of the user group to interchange message primitives.

32. (Currently amended) The method of claim 31, further comprising:

receiving a get group information primitive from a requesting member user of the user group, and

providing a group information primitive indicative of the selected group information to the requesting member user.

33. (Currently amended) The method of claim 31, further comprising:

receiving a modify group primitive from a requesting member user of a the user group, and

providing a group information primitive indicative of modified group information of the user group to the requesting member user.

34. (Currently amended) The method of claim 31, further comprising:

receiving a delete group primitive from a requesting member user of a the user group, and by

providing ~~to the member users of said user group~~ a status primitive indicative of disestablishment of said user group to the member users of the user group.

35. (Currently amended) The method of claim 22, further comprising:

receiving a store content primitive from a storing user,
storing any content conveyed in a content information element of said store content primitive along with or according to one or more information elements ~~identifying~~ of said store content primitive, said one or more information elements identifying a store transaction, a storing user, a storing client used by said storing user, a group, properties of said content, and a header of said content,

providing a content information primitive to member users in said group, said content information primitive having information elements identifying said content information primitive, said store transaction, and said header,

receiving a get content information primitive from a retrieving user in said group, said get content information primitive having information elements identifying said get content

primitive, a retrieval transaction, the retrieving user, a retrieving client used by said retrieving user, and said group, and

providing a receive content primitive to said retrieving user, said receive content primitive having information elements identifying said receive content primitive, said retrieval transaction, said group, said content, said header of said content, and ~~having an~~ information element containing ~~shared~~ content for ~~storing~~ sharing among ~~said~~ member users of said group.

36. (Currently amended) The method of claim ~~29~~35, further comprising:

receiving a delete content primitive from a deleting user, said delete content primitive having information elements identifying said delete content primitive, a delete transaction, the deleting user, a deleting client used by said deleting user, said group, and content for deletion, and

deleting said ~~shared~~ content.

37. (Currently amended) The method of claim 22, further comprising:

providing a content information primitive to a notified user, said content information primitive ~~from a server~~ having information elements identifying said content information primitive, a store transaction, and a header,

receiving a get content information primitive from said notified user, said get content information primitive having information elements identifying said get content primitive, a retrieval transaction, and said notified user, and

providing a receive content primitive ~~from said server to said notified client user~~, said receive content primitive having information elements identifying said receive content primitive, said retrieval transaction, said header, and ~~having an~~ information element containing ~~shared~~ a content.

38. (Currently amended) The method of claim ~~34~~22, further comprising:

receiving a store shared content primitive from a storing user, said store shared content primitive comprising one or more information elements including an information element

containing said shared content, and information elements identifying said store shared content primitive, a store transaction, the storing user and a header, and

storing said shared content ~~wherein~~-in response to the store shared content primitive;
~~said shared content is stored in the server.~~

39. (Currently amended) The method of claim ~~37~~38, further comprising:

receiving a delete content primitive from a deleting user, said delete content primitive comprising one or more information elements identifying said delete content primitive, a delete transaction, the deleting user and a content for deletion, and

deleting said content ~~wherein~~-in response to the delete content primitive, ~~said content for deletion is deleted from the server.~~

40. (Previously presented) The method of claim 22, further comprising an exception management method for use in exception handling of a transaction by a user or a server in responding to a request by said server or said user, respectively, said exception management method comprising:

providing a status primitive in said responding to said request for indicating success or failure of said transaction as well as further information contained in information elements of said status primitive, and

receiving said status primitive in said requesting server or said requesting user for recognizing said indication of success or failure.

41. (Original) The method of claim 40, wherein said information elements include a message identifier, a transaction identifier, and a status value indicative of said success or failure.

42. (Currently amended) ~~A server configured to provide presence information service to a plurality of users through their respective clients, wherein presence information of said users and/or clients is requested or provided through the server in terms of primitives, said server comprising:~~

a data storage, configured to store presence information of a plurality of said users
~~and/or said clients~~ of a presence information service,

a plurality of client interfaces, configured to communicate with said users through
their respective clients, and

a processor, configured to manage the presence information service,
wherein said server is configured to:

~~receive an authorize presence primitive from an authorizing user authorizing access to~~
~~selected presence information of said authorizing user;~~

~~receive an update presence primitive from an updating user, wherein said update~~
~~presence primitive includes one or more presence values to be updated;~~

~~receive a get presence primitive from a requesting user for requesting presence~~
~~information of a requested user, to which a response including requested presence information~~
~~is required; or~~

~~receive a subscribe presence primitive from a client of a requesting subscribing user~~
~~for subscribing presence information of a requested user, to which on-going responses~~
~~including requested presence information are required;~~

~~and a processor, configured to:~~

~~determine if access a subscription to said presence information of the requested user~~
~~has been pre-authorized and by the requested user,~~

~~if the subscription has not been pre-authorized, request an authorization and receive an~~
~~authorize presence primitive from the requested user,~~

~~and if the subscription has been authorized or pre-authorized.~~

~~provide a presence primitive including said requested presence information of the~~
~~requested user to the requesting user according to the subscription,~~

~~wherein said subscription is valid for a period of time in which or provide one or more~~
~~presence primitives including requested presence information of the requested user are~~
~~provided on an on-going basis to said client of said requesting subscribing user, particularly~~
~~after receiving an update presence primitive including one or more presence attribute values~~
~~to be updated of said presence information from said requested user,~~

wherein ~~a~~the presence primitive comprises one or more information elements including a presence information element, said presence information element comprises one or more presence attributes, the values of the attributes indicating presence status of ~~a~~the requested user or a client of the requested user at the time the presence information is provided, said presence attributes are classifiable in any one or more of the following: client reachability, user availability, user personal status, user or client location, and client capabilities,

and wherein said values of the presence attributes have associated space and time information useable by the server to modify said presence attribute values or related presence attribute values in processing said presence primitive.

43. (Currently amended) The server of claim 42, wherein said one or more information elements further include a message identifier, a transaction identifier, and an identification of ~~a~~the requested user and/or ~~a~~the requesting user.

44. (Canceled)

45. (Currently amended) The server of claim 42, wherein said ~~processor~~server is further configured to request ~~an~~the authorization from ~~a~~the requested user by providing a request presence authorization primitive, said request presence authorization primitive comprises one or more information elements including a message identifier, an authorization request transaction identifier, a requesting user identifier and a list of presence attributes whose values are to be included in the presence primitive.

46. (Currently amended) The server of claim 42, wherein ~~said presence information is authorized by an authorizing user in an authorizing presence primitive~~, said authorize presence primitive comprises one or more information elements including a message identifier, an authorization request transaction identifier, a requesting user identifier, and a list of presence attributes whose values are to be included in the presence primitive.

47. (Previously presented) The server of claim 46, wherein said authorize presence primitive further comprises a group identifier if the authorization is related to a group.

48. (Previously presented) The server of claim 42, wherein a buddy list user maintains one or more buddy lists on the server for sending messages to one or more recipient users separately or to every user on a buddy list through the server, and wherein the recipient users are not necessarily aware of the buddy list and cannot refer to the buddy list with any replies they make, and said buddy list user maintaining one or more buddy lists on said server is able to access presence information of one or more users on the buddy list.

49. (Currently amended) The server of claim 42, wherein the ~~client interfaces are~~ server is further configured to:

receive a join group primitive from a joining member user joining a private user group, and

~~and wherein the processor is further configured to:~~

provide presence primitives indicative of presence information of member users of said private user group to said joining member user upon joining said private user group but not after departing, and

provide a group left primitive indicative of a departing member user to remaining private user group member users upon receipt of a leave group primitive indicative of said departing member user.

50. (Currently amended) The server of claim 49, wherein the joining member user may join the group only if said join group primitive is preceded by an ~~invitation to join~~ invite user primitive provided by an inviting user to said joining member user.

51. (Currently amended) The server of claim 42, wherein the ~~client interfaces are~~ server is further configured to:

receive a create group primitive from a member user creating a user group, said create group primitive having information elements indicative of identification of a client used by

the member user creating the user group, identification of the member user creating the user group, and a list of other member users of the user group,

~~and wherein the processor is further configured to:~~

~~report to the member users with~~provide a group information primitive to the other member user indicative of establishment of the user group and selected group information, and

permit member users of the user group to interchange message primitives.

52. (Currently amended) The server of claim 51, wherein the ~~client interfaces are~~server is further configured to:

receive a get group information primitive from a requesting member user of the user group, and

~~and wherein the processor is further configured to:~~

provide a group information primitive indicative of the selected group information to the requesting member user.

53. (Currently amended) The server of claim 51, wherein the ~~client interfaces are~~server is further configured to:

receive a modify group primitive from a requesting member user of a the user group, and

~~and wherein the processor is further configured to:~~

provide a group information primitive indicative of modified group information of the user group to the requesting member user.

54. (Currently amended) The server of claim 51, wherein the ~~client interfaces are~~server is further configured to:

receive a delete group primitive from a requesting member user of a the user group, and

~~and wherein the processor is further configured to:~~

~~provide to the member users of said user group a status primitive indicative of disestablishment of said user group~~ to the member users of said user group.

55. (Currently amended) The server of claim 42, wherein the ~~client interfaces a~~ server is further configured to:

receive a store content primitive from a storing user, ~~and~~
store any content conveyed in a content information element of said store content primitive along with or according to one or more information elements of said store content primitive, said one or more information elements identifying a store transaction, a storing user, a storing client used by said storing user, a group, properties of said content, and a header of said content,

provide a content information primitive to member users in said group, said content information primitive having information elements identifying said content information primitive, said store transaction, and said header,

receive a get content information primitive from a retrieving user in said group, said get content information primitive having information elements identifying said get content primitive, a retrieval transaction, the retrieving user, a retrieving client used by said retrieving user, and said group, and

~~and wherein the data storage is configured to:~~

~~store any content conveyed in a content information element of said content primitive along with or according to information elements identifying said store content primitive, a store transaction, a storing user, a storing client used by said storing user, a group, properties of said content, and a header of said content,~~

~~and wherein the processor is further configured to:~~

~~provide a content information primitive to member users in said group having information elements identifying said content information primitive, said store transaction, and said header, and~~

provide a receive content primitive to said retrieving user, said receive content primitive having information elements identifying said receive content primitive, said retrieval transaction, said group, said content, said header of said content, and ~~having an~~

information element containing ~~shared~~ content for ~~storing~~ sharing among said member users of said group.

56. (Currently amended) The server of claim ~~49~~55, further configured to:

~~wherein the client interfaces are further configured to receive a delete content primitive from a deleting user, said delete content primitive having information elements identifying said delete content primitive, a delete transaction identifier, a deleting user identifier, a deleting client used by said deleting user, said group, and content for deletion, and wherein the processor is further configured to delete said shared content.~~

57. (Currently amended) The server of claim 42, further configured to:

provide a content information primitive to a notified user, said content information primitive having information elements identifying said content information primitive, a store transaction, and a header.

~~wherein the client interfaces are further configured to receive a get content information primitive from a~~ said notified user, said get content information primitive having information elements identifying said get content information primitive, a retrieval transaction, and said notified user, and

~~and wherein the processor is configured to provide a content information primitive to the notified user having information elements identifying said content information primitive, a store transaction, and a header,~~

~~, and~~

~~and to provide a receive content primitive to said notified client user, said receive content primitive~~ having information elements identifying said receive content primitive, said retrieval transaction, said header, and having an information element containing shared a content.

58. (Currently amended) The server of claim ~~57~~42, wherein the ~~client interfaces are~~ server is further configured to:

receive a store shared content primitive from a storing user, said store shared content primitive comprising one or more information elements including an information element containing said shared content, and having content in an information element thereof for said adding to said shared content along with or according to information elements identifying said store shared content primitive, a store transaction, the storing user and a header, and
store said shared content in response to the store shared content primitive.

59. (Currently amended) The server of claim ~~57~~58, wherein the ~~client interfaces are~~server is further configured to:

receive a delete content primitive from ~~said a deleting user at said server~~, said delete content primitive having information elements identifying said delete content primitive, a delete transaction, the deleting user and a content for deletion, and
delete said content in response to said delete content primitive.

60. (Currently amended) The server of claim 42, wherein the ~~processor~~server is further configured to:

carry out exception handling of a transaction by a user or the server in responding to a request by said server or said user, respectively, and

provide a status primitive in said responding to said request for indicating success or failure of said transaction as well as further information contained in information elements of said status primitive, and

wherein the client interfaces are further configured to receive said status primitive for recognizing said indication of success or failure.

61. (Original) The server of claim 60, wherein said information elements include a message identifier, a transaction identifier, and a status value indicative of said success or failure.

62. (Canceled)

63. (Canceled)

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64. (Canceled)